

Signify Classified - Internal  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: McGRAW-EDISON

Report Number: P642428

Luminaire Tested: GWS-SA6C-830-U-RW-W

Issue Date: 1/10/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P642428  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-49)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 1/10/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: McGRAW-EDISON  
Catalog Number: GWS-SA6C-830-U-RW-W  
Description: GALLEON WALL SLIM LUMINAIRE. (6) LIGHTSQUARES WITH 16 LEDS EACH AND RECTANGULAR WIDE OPTICS  
Light Source: (96) 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

**Summary**

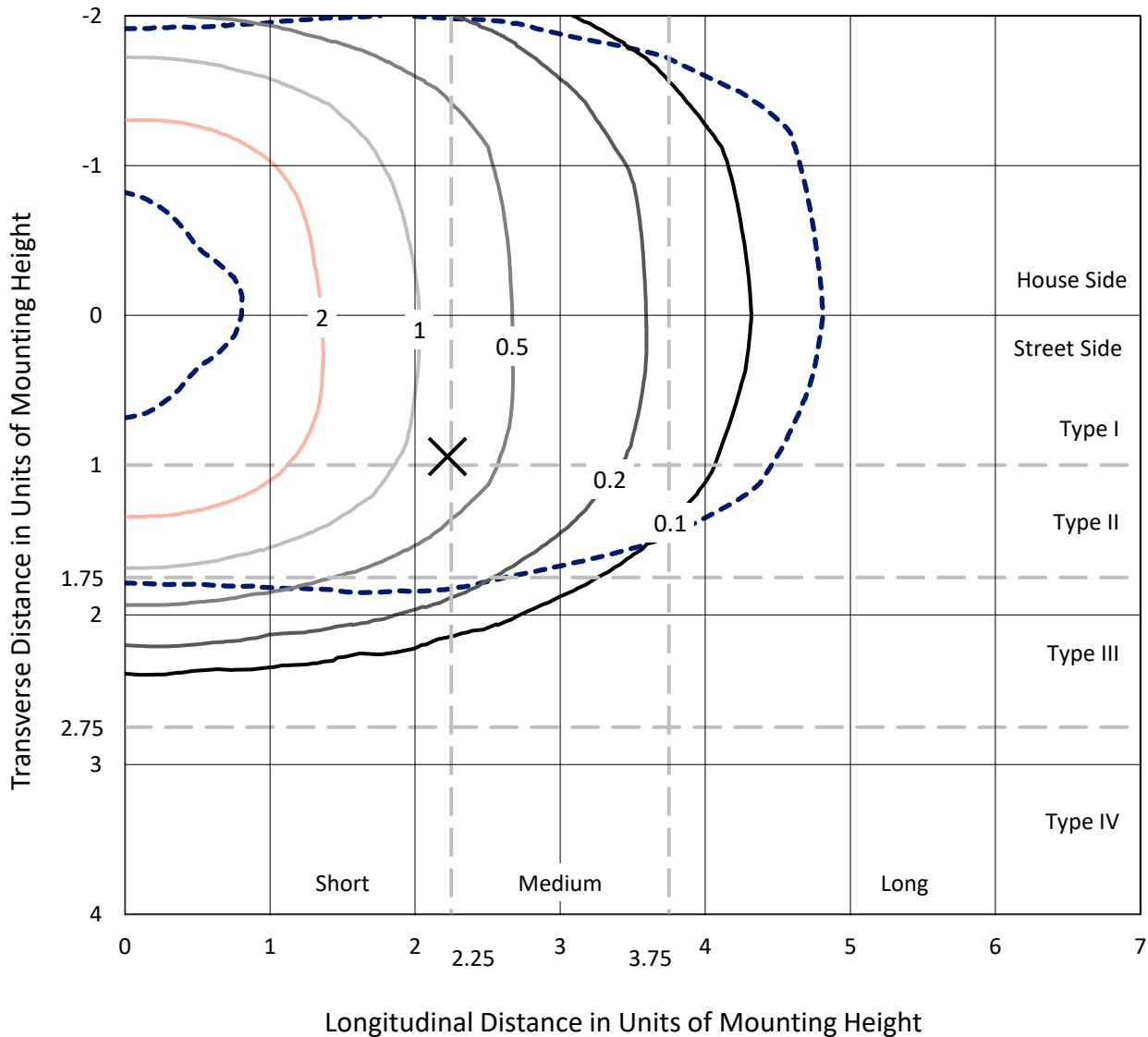
Lumens per Lamp: N/A  
Luminaire Lumens: 23220.2 lumens  
Efficiency: N/A  
Efficacy: 122.7 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B4 - U0 - G4  
  
Input Watts (W): 189.2  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 0  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



REPORT NUMBER: P642428  
 CATALOG NUMBER: GWS-SA6C-830-U-RW-W

### Iso-Footcandle Lines of Horizontal Illumination

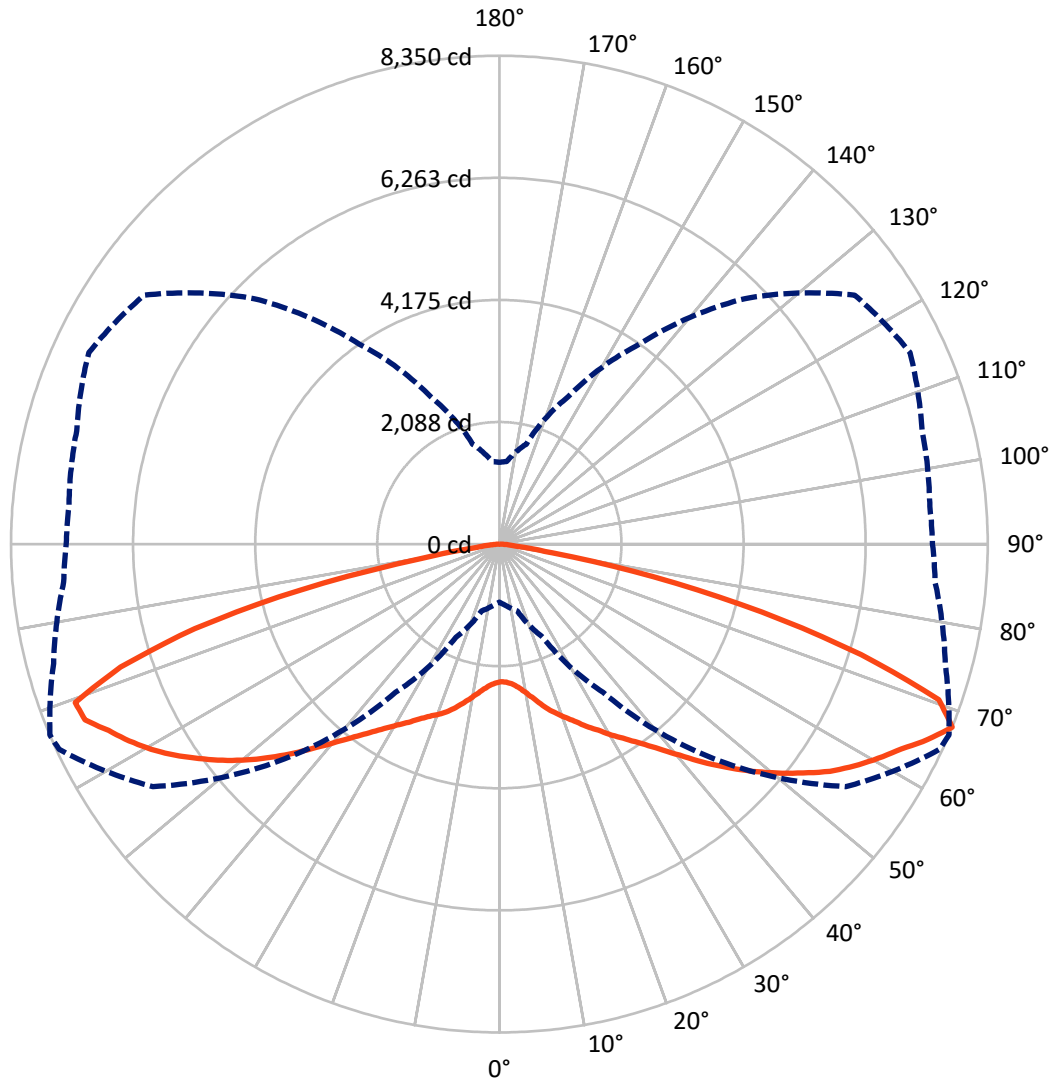
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.3 fc  
 Type III - Short - N/A

REPORT NUMBER: P642428  
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### Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	11482.0	0.0	11482.0
	% Fixture	49.4	0.0	49.4
<b>Street Side</b>	Lumens	11738.2	0.0	11738.2
	% Fixture	50.6	0.0	50.6
<b>Total</b>	Lumens	23220.2	0.0	23220.2
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	230.7	1.0
10°-20°	779.3	3.4
20°-30°	1529.0	6.6
30°-40°	2605.0	11.2
40°-50°	4183.0	18.0
50°-60°	5683.9	24.5
60°-70°	5437.0	23.4
70°-80°	2585.0	11.1
80°-90°	187.3	0.8
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	23220.2	100.0
0°-180°	23220.2	100.0

**Coefficient of Utilization**



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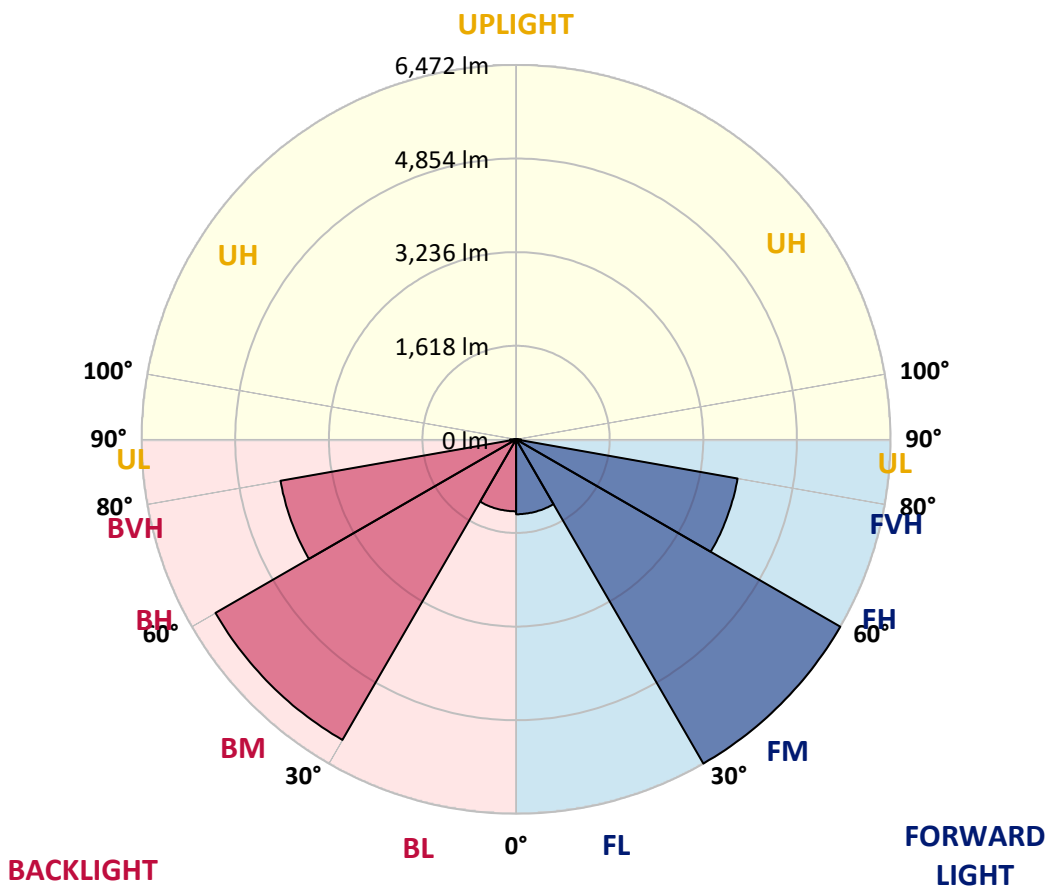
CATALOG NUMBER: GWS-SA6C-830-U-RW-W

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1294.7	5.6			
FM (30°-60°)	6471.7	27.9			
FH (60°-80°)	3887.7	16.7			G2/5000
FVH (80°-90°)	84.2	0.4			G1/100
BL (0°-30°)	1244.3	5.4	B3/2500		
BM (30°-60°)	6000.2	25.8	B4/8500		
BH (60°-80°)	4134.3	17.8	B4/5000		G4/5000
BVH (80°-90°)	103.1	0.4			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B4-U0-G4**

Type III Short





REPORT NUMBER: P642428  
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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	2351.2	2351.2	2351.2	2351.2	2351.2	2351.2	2351.2	2351.2	2351.2	2351.2	2351.2
2.5°	2302.7	2305.9	2310.7	2320.5	2330.2	2344.7	2359.3	2357.6	2364.1	2369.0	2373.8
5°	2289.7	2293.0	2301.0	2314.0	2328.5	2352.8	2383.5	2396.5	2406.2	2423.9	2440.1
7.5°	2317.2	2323.7	2335.0	2352.8	2375.4	2406.2	2448.2	2470.8	2485.4	2517.7	2545.2
10°	2354.4	2362.5	2385.1	2419.1	2453.0	2499.9	2553.3	2587.3	2597.0	2639.0	2690.8
12.5°	2390.0	2399.7	2436.9	2498.3	2559.8	2622.8	2685.9	2727.9	2731.2	2787.8	2846.0
15°	2446.6	2454.7	2504.8	2584.0	2677.8	2765.1	2842.8	2871.9	2884.8	2925.2	2998.0
17.5°	2571.1	2580.8	2645.5	2731.2	2829.8	2922.0	2999.6	3023.9	3023.9	3057.8	3117.7
20°	2705.3	2715.0	2800.7	2910.7	3030.3	3124.1	3183.9	3161.3	3153.2	3162.9	3205.0
22.5°	2855.7	2873.5	2955.9	3083.7	3230.8	3345.7	3376.4	3308.5	3285.8	3263.2	3272.9
25°	3048.1	3069.1	3150.0	3285.8	3429.7	3551.0	3568.8	3463.7	3450.8	3371.5	3342.4
27.5°	3269.7	3285.8	3386.1	3520.3	3654.5	3756.4	3775.8	3646.4	3602.8	3492.8	3424.9
30°	3555.9	3570.4	3657.7	3790.3	3906.8	3977.9	4002.2	3824.3	3790.3	3622.2	3517.1
32.5°	3868.0	3874.4	3963.4	4091.1	4194.6	4262.5	4228.6	4021.6	3971.4	3782.3	3638.3
35°	4225.3	4225.3	4340.1	4443.6	4526.1	4545.5	4480.8	4244.7	4186.5	3981.1	3801.7
37.5°	4576.2	4585.9	4692.6	4815.5	4888.3	4885.1	4767.0	4508.3	4442.0	4218.9	4020.0
40°	4956.2	4977.2	5084.0	5221.4	5291.0	5281.2	5100.1	4812.3	4744.4	4480.8	4286.8
42.5°	5305.5	5339.5	5464.0	5604.7	5680.7	5674.2	5485.0	5161.6	5095.3	4797.8	4603.7
45°	5583.6	5619.2	5774.4	5970.1	6091.4	6080.1	5889.3	5523.8	5443.0	5130.9	4917.4
47.5°	5827.8	5865.0	6038.0	6245.0	6437.4	6456.8	6282.2	5889.3	5803.6	5488.2	5247.3
50°	6015.4	6033.2	6227.2	6453.6	6676.8	6785.1	6633.1	6256.3	6152.8	5840.7	5569.1
52.5°	6000.8	6025.1	6264.4	6571.6	6870.8	7048.7	6943.6	6602.4	6502.1	6162.5	5897.3
55°	5704.9	5729.2	6013.8	6461.7	6979.1	7241.1	7229.8	6932.2	6859.5	6490.8	6238.5
57.5°	5273.2	5326.5	5609.5	6093.0	6836.8	7394.7	7440.0	7233.0	7157.0	6812.6	6576.5
60°	4500.2	4571.4	4898.0	5525.4	6380.8	7343.0	7664.8	7486.9	7440.0	7111.7	6882.1
62.5°	3269.7	3321.4	3756.4	4579.5	5704.9	6974.3	7854.0	7748.9	7713.3	7380.2	7158.6
65°	1958.2	2076.3	2425.6	3238.9	4602.1	6279.0	7750.5	8091.7	8054.5	7656.7	7394.7
67.5°	991.2	1044.6	1182.1	1756.1	3095.0	5195.5	7231.4	8305.1	8350.4	7892.8	7478.8
70°	614.5	629.0	667.8	866.7	1545.9	3413.6	5913.5	7748.9	7970.4	7855.6	7260.5
72.5°	493.2	496.4	502.9	540.1	742.2	1596.0	3738.6	6068.7	6468.2	7336.5	6948.4
75°	409.1	410.7	412.3	423.7	462.5	651.7	1819.2	4170.3	4637.7	6235.3	6442.3
77.5°	328.3	320.2	326.6	331.5	341.2	363.8	627.4	2225.0	2698.8	4092.7	4982.1
80°	213.4	210.2	223.2	228.0	237.7	252.3	334.7	755.2	916.9	1489.3	1584.7
82.5°	114.8	108.3	135.8	131.0	135.8	147.2	197.3	276.5	310.5	449.5	380.0
85°	35.6	35.6	37.2	43.7	53.4	51.7	85.7	135.8	150.4	192.4	142.3
87.5°	6.5	6.5	6.5	6.5	6.5	8.1	17.8	27.5	37.2	66.3	50.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P642428  
 CATALOG NUMBER: GWS-SA6C-830-U-RW-W

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2351.2	2351.2	2351.2	2351.2	2351.2	2351.2	2351.2	2351.2	2351.2	2351.2	2351.2
2.5°	2383.5	2369.0	2377.0	2381.9	2380.3	2377.0	2360.9	2357.6	2349.6	2336.6	2333.4
5°	2454.7	2438.5	2440.1	2435.3	2419.1	2398.1	2362.5	2344.7	2330.2	2314.0	2312.4
7.5°	2566.2	2548.5	2543.6	2521.0	2475.7	2427.2	2370.6	2338.2	2314.0	2293.0	2289.7
10°	2708.5	2690.8	2674.6	2621.2	2546.8	2482.2	2407.8	2360.9	2325.3	2299.4	2294.6
12.5°	2867.0	2852.5	2812.0	2734.4	2645.5	2569.5	2493.5	2435.3	2383.5	2344.7	2339.9
15°	3043.3	3010.9	2949.5	2849.2	2765.1	2703.7	2611.5	2532.3	2449.8	2398.1	2386.7
17.5°	3166.2	3138.7	3065.9	2968.9	2902.6	2849.2	2740.9	2627.7	2516.1	2440.1	2423.9
20°	3253.5	3224.4	3141.9	3070.8	3049.7	3004.5	2878.3	2747.3	2618.0	2524.2	2503.2
22.5°	3316.5	3285.8	3201.7	3166.2	3195.3	3187.2	3064.3	2915.5	2761.9	2650.3	2624.5
25°	3376.4	3347.3	3272.9	3285.8	3363.4	3387.7	3255.1	3082.1	2907.4	2776.5	2745.7
27.5°	3433.0	3395.8	3361.8	3433.0	3542.9	3588.2	3447.5	3251.9	3062.7	2928.5	2904.2
30°	3520.3	3476.6	3471.8	3575.3	3749.9	3788.7	3633.5	3437.8	3250.2	3114.4	3083.7
32.5°	3630.3	3589.8	3593.1	3748.3	3950.4	3982.8	3850.2	3667.4	3479.9	3344.0	3302.0
35°	3779.0	3728.9	3756.4	3947.2	4150.9	4210.8	4104.0	3952.0	3769.3	3630.3	3583.4
37.5°	3984.4	3911.6	3968.2	4168.7	4374.1	4463.0	4380.6	4267.4	4086.3	3945.6	3901.9
40°	4246.3	4186.5	4209.2	4430.7	4642.5	4749.2	4697.5	4585.9	4406.4	4259.3	4209.2
42.5°	4556.8	4497.0	4488.9	4725.0	4936.8	5098.5	5048.4	4946.5	4760.6	4592.4	4543.9
45°	4860.8	4805.8	4817.2	5058.1	5295.8	5472.1	5421.9	5302.3	5100.1	4906.1	4867.3
47.5°	5177.8	5132.5	5142.2	5397.7	5659.6	5835.9	5772.8	5627.3	5391.2	5184.2	5137.3
50°	5502.8	5451.0	5465.6	5734.0	6017.0	6183.6	6086.5	5871.5	5611.1	5409.0	5368.6
52.5°	5826.2	5764.7	5801.9	6055.8	6348.5	6481.1	6301.6	6041.3	5789.0	5588.5	5543.2
55°	6198.1	6133.4	6093.0	6364.7	6654.1	6709.1	6463.3	6159.3	5860.1	5632.1	5604.7
57.5°	6537.7	6482.7	6406.7	6678.4	6891.8	6851.4	6587.8	6127.0	5687.1	5394.4	5355.6
60°	6841.7	6794.8	6728.5	6959.7	7056.8	6966.2	6487.6	5743.7	5260.2	4954.6	4936.8
62.5°	7121.4	7071.3	7009.9	7207.1	7194.2	6984.0	6031.6	5155.1	4508.3	4180.0	4150.9
65°	7343.0	7297.7	7279.9	7435.1	7414.1	6636.3	5321.7	4191.4	3293.9	2923.6	2912.3
67.5°	7406.0	7388.3	7483.7	7747.2	7419.0	5937.8	4173.6	2779.7	1769.0	1418.1	1397.1
70°	7170.0	7168.3	7441.6	7818.4	6746.3	4535.8	2462.8	1253.2	889.4	789.1	776.2
72.5°	6862.7	6857.9	7074.5	6744.7	5003.1	2482.2	1036.5	671.1	556.3	528.8	528.8
75°	6358.2	6345.3	6508.6	5130.9	2813.6	934.6	549.8	460.9	436.6	431.7	431.7
77.5°	5182.6	5074.3	4817.2	3171.0	981.5	459.2	363.8	362.2	347.7	346.0	346.0
80°	1704.4	1704.4	1980.9	1209.5	433.4	283.0	257.1	270.0	255.5	245.8	244.2
82.5°	278.1	383.2	544.9	346.0	234.5	176.3	158.5	168.2	176.3	140.7	140.7
85°	110.0	143.9	210.2	161.7	108.3	71.1	76.0	84.1	74.4	64.7	63.1
87.5°	42.0	51.7	74.4	38.8	22.6	12.9	8.1	8.1	6.5	6.5	6.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



LM-79-2019: Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Report Prepared for

Cooper Lighting Solutions

MCGRAW EDISON

Report Number: SP1-2408-195-9

Test Date: 08/07/2024

Luminaire Tested: GALN-SB1A-830-U-5WQ

Data in this report applies to families of products including GALN-SB1A-830-U-5WQ.

**Test Information**

Test Method: LM-79-2019  
 Report Number: SP1-2408-195-9  
 Test Lab: COOPER LIGHTING SOLUTIONS  
 Photometer: SP1 - 76IN SPHERE  
 Measurement Geometry: 4π  
 Issue Date: 08/07/2024  
 Manufacturer: COOPER LIGHTING SOLUTIONS  
 Product Line: MCGRAW EDISON  
 Catalog Number: **GALN-SB1A-830-U-5WQ**  
 Description: GALLEON AREA AND ROADWAY LUMINAIRE. (1) 80 CRI, 3000K, 350MA HIGH DENSITY LIGHTSQUARE WITH 26 LEDS AND TYPE V WIDE OPTICS

**Spectral Parameters**

CCT (K): 3050  
 CIE u': 0.2476  
 CIE v': 0.5251  
 Duv: 0.0034  
 CIE x: 0.4383  
 CIE y: 0.4131  
 CIE z: 0.1487  
 Peak Wavelength (nm): 603  
 Dominant Wavelength (nm): 581  
 Purity: 55.55201  
 Rf: 81.5  
 Rg: 99.2

CRI (Ra):	81.0		
R1:	79.6	R9:	7.1
R2:	85.6	R10:	67.0
R3:	92.0	R11:	82.7
R4:	82.6	R12:	63.2
R5:	78.9	R13:	80.3
R6:	81.7	R14:	95.0
R7:	85.2	R15:	71.7
R8:	62.0		



**Test Conditions**

Stabilization Time: 20M  
 Operation Time: 1H 20M  
 Sphere Temperature (°C): 24.2

REPORT NUMBER: SP1-2408-195-9

Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085	10/24/2023	10/24/2024
Room Thermometer	IN0046	10/24/2023	10/24/2024

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**CIE 1931 Chromaticity Diagram**



**CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles**



Point lies inside the ANSI 3000K 4-step quadrangle

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**Photopic Flux vs. Wavelength**



**Photopic Lumens: NR**

$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300	NR	630	847	NR	760	26	NR	890	1	NR
375	0	NR	505	372	NR	635	790	NR	765	22	NR	895	1	NR
380	0	NR	510	430	NR	640	730	NR	770	19	NR	900	1	NR
385	0	NR	515	483	NR	645	668	NR	775	16	NR	905	1	NR
390	0	NR	520	524	NR	650	605	NR	780	14	NR	910	0	NR
395	2	NR	525	555	NR	655	545	NR	785	12	NR	915	0	NR
400	4	NR	530	581	NR	660	485	NR	790	10	NR	920	0	NR
405	7	NR	535	604	NR	665	430	NR	795	9	NR	925	0	NR
410	17	NR	540	623	NR	670	378	NR	800	8	NR	930	0	NR
415	34	NR	545	645	NR	675	331	NR	805	7	NR	935	0	NR
420	68	NR	550	667	NR	680	290	NR	810	6	NR	940	0	NR
425	128	NR	555	693	NR	685	251	NR	815	5	NR	945	0	NR
430	214	NR	560	719	NR	690	218	NR	820	4	NR	950	0	NR
435	339	NR	565	754	NR	695	188	NR	825	4	NR	955	0	NR
440	507	NR	570	791	NR	700	162	NR	830	3	NR	960	0	NR
445	573	NR	575	830	NR	705	139	NR	835	3	NR	965	0	NR
450	356	NR	580	873	NR	710	119	NR	840	3	NR	970	0	NR
455	217	NR	585	913	NR	715	102	NR	845	2	NR	975	0	NR
460	168	NR	590	948	NR	720	88	NR	850	2	NR	980	0	NR
465	113	NR	595	974	NR	725	76	NR	855	2	NR	985	0	NR
470	85	NR	600	994	NR	730	65	NR	860	1	NR	990	0	NR
475	85	NR	605	998	NR	735	55	NR	865	1	NR	995	0	NR
480	94	NR	610	994	NR	740	47	NR	870	1	NR	1000	0	NR
485	120	NR	615	973	NR	745	41	NR	875	1	NR			

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**Scotopic Flux vs. Wavelength**



**Scotopic Lumens: NR**

**S/P: 1.27**

$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300	NR	630	847	NR	760	26	NR	890	1	NR
375	0	NR	505	372	NR	635	790	NR	765	22	NR	895	1	NR
380	0	NR	510	430	NR	640	730	NR	770	19	NR	900	1	NR
385	0	NR	515	483	NR	645	668	NR	775	16	NR	905	1	NR
390	0	NR	520	524	NR	650	605	NR	780	14	NR	910	0	NR
395	2	NR	525	555	NR	655	545	NR	785	12	NR	915	0	NR
400	4	NR	530	581	NR	660	485	NR	790	10	NR	920	0	NR
405	7	NR	535	604	NR	665	430	NR	795	9	NR	925	0	NR
410	17	NR	540	623	NR	670	378	NR	800	8	NR	930	0	NR
415	34	NR	545	645	NR	675	331	NR	805	7	NR	935	0	NR
420	68	NR	550	667	NR	680	290	NR	810	6	NR	940	0	NR
425	128	NR	555	693	NR	685	251	NR	815	5	NR	945	0	NR
430	214	NR	560	719	NR	690	218	NR	820	4	NR	950	0	NR
435	339	NR	565	754	NR	695	188	NR	825	4	NR	955	0	NR
440	507	NR	570	791	NR	700	162	NR	830	3	NR	960	0	NR
445	573	NR	575	830	NR	705	139	NR	835	3	NR	965	0	NR
450	356	NR	580	873	NR	710	119	NR	840	3	NR	970	0	NR
455	217	NR	585	913	NR	715	102	NR	845	2	NR	975	0	NR
460	168	NR	590	948	NR	720	88	NR	850	2	NR	980	0	NR
465	113	NR	595	974	NR	725	76	NR	855	2	NR	985	0	NR
470	85	NR	600	994	NR	730	65	NR	860	1	NR	990	0	NR
475	85	NR	605	998	NR	735	55	NR	865	1	NR	995	0	NR
480	94	NR	610	994	NR	740	47	NR	870	1	NR	1000	0	NR
485	120	NR	615	973	NR	745	41	NR	875	1	NR			

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**Melanopic Flux vs. Wavelength**



**Melanopic Lumens: NR**

**M/P: 2.32**

λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300	NR	630	847	NR	760	26	NR	890	1	NR
375	0	NR	505	372	NR	635	790	NR	765	22	NR	895	1	NR
380	0	NR	510	430	NR	640	730	NR	770	19	NR	900	1	NR
385	0	NR	515	483	NR	645	668	NR	775	16	NR	905	1	NR
390	0	NR	520	524	NR	650	605	NR	780	14	NR	910	0	NR
395	2	NR	525	555	NR	655	545	NR	785	12	NR	915	0	NR
400	4	NR	530	581	NR	660	485	NR	790	10	NR	920	0	NR
405	7	NR	535	604	NR	665	430	NR	795	9	NR	925	0	NR
410	17	NR	540	623	NR	670	378	NR	800	8	NR	930	0	NR
415	34	NR	545	645	NR	675	331	NR	805	7	NR	935	0	NR
420	68	NR	550	667	NR	680	290	NR	810	6	NR	940	0	NR
425	128	NR	555	693	NR	685	251	NR	815	5	NR	945	0	NR
430	214	NR	560	719	NR	690	218	NR	820	4	NR	950	0	NR
435	339	NR	565	754	NR	695	188	NR	825	4	NR	955	0	NR
440	507	NR	570	791	NR	700	162	NR	830	3	NR	960	0	NR
445	573	NR	575	830	NR	705	139	NR	835	3	NR	965	0	NR
450	356	NR	580	873	NR	710	119	NR	840	3	NR	970	0	NR
455	217	NR	585	913	NR	715	102	NR	845	2	NR	975	0	NR
460	168	NR	590	948	NR	720	88	NR	850	2	NR	980	0	NR
465	113	NR	595	974	NR	725	76	NR	855	2	NR	985	0	NR
470	85	NR	600	994	NR	730	65	NR	860	1	NR	990	0	NR
475	85	NR	605	998	NR	735	55	NR	865	1	NR	995	0	NR
480	94	NR	610	994	NR	740	47	NR	870	1	NR	1000	0	NR
485	120	NR	615	973	NR	745	41	NR	875	1	NR			

**Summary**

$R_f = 81.5$   
 $R_g = 99.2$   
 $CIE R_a = 81.0$   
 $R_9 = 7.1$



**Color Vector Graphics**





**Individual Sample Fidelity Index ( $R_{f,i}$ )**

CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82 = 95
CES08 = 41	CES33 = 71	CES58 = 78	CES83 = 90
CES09 = 29	CES34 = 82	CES59 = 92	CES84 = 94
CES10 = 76	CES35 = 90	CES60 = 95	CES85 = 86
CES11 = 59	CES36 = 93	CES61 = 93	CES86 = 72
CES12 = 65	CES37 = 87	CES62 = 83	CES87 = 85
CES13 = 43	CES38 = 75	CES63 = 77	CES88 = 83
CES14 = 74	CES39 = 94	CES64 = 83	CES89 = 75
CES15 = 71	CES40 = 89	CES65 = 77	CES90 = 81
CES16 = 47	CES41 = 85	CES66 = 80	CES91 = 96
CES17 = 50	CES42 = 86	CES67 = 79	CES92 = 73
CES18 = 56	CES43 = 81	CES68 = 84	CES93 = 84
CES19 = 72	CES44 = 99	CES69 = 91	CES94 = 64
CES20 = 66	CES45 = 87	CES70 = 78	CES95 = 80
CES21 = 87	CES46 = 82	CES71 = 76	CES96 = 84
CES22 = 79	CES47 = 77	CES72 = 92	CES97 = 87
CES23 = 92	CES48 = 71	CES73 = 71	CES98 = 81
CES24 = 91	CES49 = 81	CES74 = 93	CES99 = 74
CES25 = 72	CES50 = 89	CES75 = 74	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)